



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE

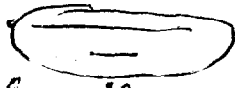

BETHESDA 14, MD.

NATIONAL INSTITUTES OF HEALTH

April 22 59  
58

Dear Josh & Ester,

Here are some additional facts about 3099. It is definitely defect in GalK, Pgal aryl transferase and 4-Epimerase (the latter is a complete block). This is the case whether I grow on Min Med with or without galactose or in nutrient medium. Even after 8 hrs additional exposure to 5% galactose there is no 'comeback.'  $\beta$ -Galactosidase is also present in galactosefree medium (glycerol,  $\text{NH}_3$  minerals) although the amounts are a good deal smaller (ca 5-6%) than in the presence of 0.5% galactose. There seems to be no basis for a permease block. Glucose-6-phosphate dehydrogenase and UDPG pyrophosphorylase are present. - I am set for microgalactose determination of the polysaccharides of the various mutants. 3099 should be devoid of galactose.

I should send you a scheme with  - because I still cannot remember the origin of Gal 9. Please, send me nice charts () just like you were writing a child and also your further plans with Gal 9.



## DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

BETHESDA 14, MD.

4/22/58

NATIONAL INSTITUTES OF HEALTH

I would be greatly interested in the epimerase mutants of *Salmonella* and *Shigella Sonii*. Both are very rich in galactose and would presumably change their immunological characteristics (selection in antiserum in gal free medium). *Shigella Sonii* is attacked by some of the T phages - perhaps an epimerase-less would also become phage-resistant. This is Aaron Kovnick's suggestion.

~~Fate for disease under genetic model~~  
My apologies I was just writing a Danish letter in between. Thanks a lot for the splendid days we spent during the Genetics meeting. Thanks also for writing Boris Rotman. I hope that he will answer me soon. Since Mike Yarmonlinsky one of <sup>Sid Colowick's</sup> Werner Maas's top students again visited me and asserted that he has definitely decided in favor of going with me. I told him now about our correspondence with Rotman and asked him to wait another 10 days. Do you think that Boris would be content with a fellowship? How long time is he going to spend with Bonnie Davis & when? Anyhow the Research Assoc. position (\$7000, subject to tax) is also with tenure and without staff affiliation. In case he applies for a fellowship I imagine that he should at least \$5500. Anyhow if he has can make up his mind soon I may take him for the Research Assoc. position. I ought only to be thankful that so many bright young people want to come and work with me. I think, however, that Milton Weiner is too advanced, at least in rank & salary to switch.